



August 14, 2014

Ms. Jami Aggers Stanislaus County Department of Environmental Resources 3800 Cornucopia Way, Suite C Modesto, CA 95358

Re: Notice of Minor Title V Permit Modification District Facility # N-3104 Project # N-1142690

Dear Ms. Aggers:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued N-3104-2-10 into the Title V operating permit. The proposed project was to increase VOC emission limit, re-evaluate the requirements referencing 40 CFR Part 62 Subpart GGG, and clarify some of the permit requirements.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued N-3104-2-10, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,

rnaud/Mariollet

Director of Permit Services

Enclosures

Gerardo C. Rios, EPA (w/enclosure) via email CC:

> Seyed Sadredin Executive Director/Air Pollution Control Officer

Title V APPLICATION REVIEW Minor Modification

Facility Number:

N-3104

Facility Name: Mailing Address:

Geer Road Landfill 3800 Cornucopia Way

Modesto, CA 95358

Contact Name:

Jami Aggers

Phone:

(209) 525-6700

Responsible Official:

Jami Aggers

Title:

Director

Processing Staff: Project Number:

Jag Kahlon N-1142690

Date:

August 14, 2014

I. PROPOSAL

The applicant has proposed to incorporate Authority to Construct (ATC) permit N-3104-2-10 into their Title V operating permit. The ATC permit was issued without Certificate of Conformity (COC). The proposed project included the following changes to permit N-3104-2-9:

1. Modify condition # 35 to increase VOC limit from 0.004 lb/MMBtu to 0.010 lb/MMBtu for the LFG vapor collection system being served by the flare.

During 2013 source test, the facility was unable to demonstrate compliance with VOC emission limit of 0.004 lb/MMBtu. This limit was proposed by the applicant in 1995 during project N-950062. They would like to increase this limit to 0.010 lb/MMBtu based on the test results of 2013 source test.

2. Modify condition #27 to state that the pilot burner shall only be ignited for the periods to maintain minimum temperature in the flare.

The applicant states that the continuous use of the pilot burner during the flaring of the LFG is merely waste of natural gas fuel. Therefore, this condition should be revised.

3. Remove conditions #1 through 9, 12 through 21, 50 and 51. These conditions require calculation of non-methane organic compound (NMOC) emissions annually, until such time either NMOC exceeds 50 Mg/year and a LFG collection and control system is installed, or until the landfill is closed, and also direct the owner or operator to the requirements that must be met once LFG collection and control requirements are triggered.

This landfill had received waste between the periods of 1970 to 1990, and ceased its operation on July 1, 1990¹. This landfill was never modified or reconstructed² since its closure in 1990. The waste acceptance rate during each of the operating years are entered, along with the site specific NMOC concentration of 378 ppmv³, as hexane, and methane generation rate of 0.02 per year, into EPA's Land Gem – Landfill Gas Emissions Model 3.02. The NMOC emissions peak was 31.25 Mg/yr in year 1990⁴. These emissions have been declining each year since 1990 as the landfill is no longer accepting any waste and has been closed since July 1, 1990.

The landfill never exceeded a NMOC emission rate of 50 Mg/year. NMOC emissions have been declining after reaching their peak in 1990. Therefore, the requirement to annually calculate NMOC emissions was never triggered under 40 CFR Part 62 Subpart GGG or 40 CFR Part 60 Subpart WWW, and the requirements in conditions #1 through 9, 12 through 21, 50 and 51 were not applicable, and consequently were removed from the permit.

Beside the changes proposed in the above section, the remaining requirements in PTO N-3104-2-9 were also examined to identify redundant requirements that may be removed or consolidated as necessary, remove any obsolete requirements directly or indirectly associated with item 3 in the section above, and include up-to-date rule references as necessary. Some recommendations were made based on this review process. Overall, the goal of these recommendations was to make this permit more clear and concise without compromising its enforceability.

The purpose of this document is to identify all applicable requirements, determine if the facility will comply with the applicable requirements, and to provide the legal and factual basis for permit requirements.

II. FACILITY LOCATION

This facility is located at 750 Geer Road, Modesto, California.

III. EQUIPMENT DESCRIPTION

MUNICIPAL SOLID WASTE LANDFILL, 3.8 MILLION CUBIC METER CAPACITY (144 ACRES), WITH GAS COLLECTION SYSTEM, A CONDENSATE INJECTION SYSTEM, AND ONE 24 MMBTU/HR JOHN ZINK MODEL ZTOF 6X45 LANDFILL GAS FIRED FLARE

http://www.calrecycle.ca.gov/SWFacilities/Directory/50-AA-0002/SearchList/

² Per definitions in 40 CFR Part 62 Subpart GGG and 40 CFR Part 60 Subpart WWW.

³ NMOC concentration in the gas at the inlet of the flare, source test conducted on June 4, 1999. The test date is near promulgation of the applicable Federal Plan (40 CFR Part 62, GGG) on November 8, 1999.

⁴LandGem results are presented in Appendix II of the application review under project N-1141056.

IV. SCOPE OF EPA AND PUBLIC REVIEW

The proposed project is a Minor Modification under Rule 2520 as project was not an SB-288 or a Federal Major Modification under Rule 2201 under project N-1141056 that resulted in ATC N-3104-2-10. Therefore, public review is not required.

V. APPLICABLE REQUIREMENTS

Rule 2520 Federally Mandated Operating Permits (6/21/01)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

This section details the changes made to the permit conditions in PTO N-3104-2-9 during processing of project N-1141056 that resulted in ATC N-3104-2-10.

Condition #1 through 9, 12 through 21, and 50 and 51

- The NMOC emission rate shall be calculated using the equation in 40CFR60.754(a)(1)(i), if the actual year-to-year solid waste acceptance rate is known or the equation in 40CFR60.754(a)(1)(ii), if the actual year-to-year solid waste acceptance rate is unknown. The values for k, Lo, and CNMOC for both equations shall be taken from 40CFR60.754(a)(1), as appropriate. Both equations may be used if the actual year-to-year acceptance rate is known for a part of the landfill life, but unknown for another part of the landfill life. The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating R, if documentation of the nature and amount of such wastes is maintained. (Tier 1 specifications) [40 CFR 60.754(a)(1) and 62.14354]
- Tier 3 specifications to determine the site-specific methane generation rate constant shall include the following: 1) EPA Method 2E or another method approved by the EPA shall be used, 2) The NMOC mass emission rate shall be recalculated using the average site-specific NMOC concentration and the site-specific methane generation rate constant k, instead of the default values in 40 CFR 60(a)(1), and 3) If the resulting calculated NMOC mass emission rate is equal to or greater than 50 megagrams/year, the landfill owner or operator shall comply with 60.752(b)(2). [40 CFR 60.754(a)(4), (a)(5) and (i) and 62.14354]
- If Tier 3 specifications are used to determine the site-specific methane generation rate and the calculated NMOC mass emission rate is less than 50 megagrams/year, then a periodic emission rate report shall be submitted to the Administrator, pursuant to 60.757(b)(1) and the NMOC concentration shall be recalculated annually, pursuant to 60.757(b)(1),

using the site-specific methane generation rate constant and the NMOC concentration obtained using Tier 2 specifications. Determination of the site-specific methane generation rate constant is performed once and used in all subsequent annual NMOC emission rate calculations. [40 CFR 60.754(a)(4)(ii) and 62.14354]

- 4. For PSD purposes, the NMOC emission rate shall be estimated and compared to the PSD major source and significance levels in 40 CFR 51.166 or 52.21, using AP-42 or EPA-approved procedures. [40 CFR 60.754(c) and 62.14354]
- The NMOC emission rate shall be recalculated and reported to the APCO annually, except as otherwise provided in this permit, until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams/year and a collection and control system is installed or until the landfill is closed. [40 CFR 60.752(b)(1), 60.754(a), 60.757(b), 62.14354 and 62.14355]
- 6. If the NMOC emission rate, as reported in the annual report is less than 50 megagrams/year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual reports for those 5 years. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years. All data and calculations upon which this estimate is based shall be provided to the APCO. This estimate shall be revised at least once every 5 years. [40 CFR 60.757(b)(1)(ii) and 62.14355]
- 7. If the actual waste acceptance rate exceeds the estimated rate used in any year reported in a 5-year estimate of the NMOC emission rate, then a revised 5-year estimate shall be submitted to the APCO. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated acceptance rate. [40 CFR 60.757(b)(1)(ii) and 62.14355]
- 8. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. [40 CFR 60.757(b)(2) and 62.14355]
- 9. If the owner or operator elects to recalculate the NMOC emission rate using Tier 3 specifications and the resulting NMOC emission rate is less than 50 megagrams/year, annual periodic reporting shall resume. The revised NMOC emission rate report, with the recalculated NMOC emission rate using Tier 3 specifications, shall be submitted within 1 year of the first

- Tier 1 calculated exceedance of 50 megagrams/year. [40 CFR 60.757(c)(2) and 62.14355]
- 12. If the landfill is permanently closed, a closure notification shall be submitted to the APCO within 30 days of waste disposal cessation. A permanent closure must take place in accordance with 40 CFR 258.60. If a closure report has been submitted, no additional waste may be placed in the landfill without filing a notification of modification to the APCO, pursuant to 40 CFR 60.7(a)(4). [40 CFR 60.752(b)(1)(ii)(B), 60.757(d) and 62.14352(f)]
- 13. If the calculated NMOC is equal to or greater than 50 megagrams/year, the owner or operator shall install a collection and control system, that effectively captures the gas generated within the landfill, within 30 months of that determination. This operating permit must be modified accordingly to show compliance with 40 CFR 62, Subpart GGG requirements applicable to a MSWL with a collection and control system. [40 CFR 60.752(b)(2)(ii), 60.753, 60.755, 60.756, 62.14353 and 62.14354]
- 14. If a gas collection and control system is installed, it shall comply with the operational standards of 40 CFR 60.753, the compliance provisions of 40 CFR 60.755, the monitoring provisions of 40 CFR 60.756, the reporting and record keeping requirements of 40 CFR 60.757 and 60.758, and the requirements of 40 CFR 60.759 (for active collection systems). [40 CFR 60.752(b)(2)(ii), 60.753, 60.755, 60.756, 60.757, 60.758, 60.759, 62.14353 and 62.14354(b)]
- 15. Permittee shall comply with the Increments of Progress as defined in Table 3 of 40 CFR 62, Subpart GGG, unless a site specific schedule is approved by EPA, which includes notification of EPA no later than 10 business days after completing each increment of progress. [40 CFR 62.14355(b)]
- Permittee shall submit the Final Control Plan (as defined in 40 CFR 62.14351) one year after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 1) [40 CFR 62.14356(a)(1)]
- 17. Permittee shall Award Contract(s) (as defined in 40 CFR 62.14351) on or before December 6, 2001, or 20 months after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 2) [40 CFR 62.14356(a)(2)]

- Permittee shall Initiate On-Site Construction (as defined in 40 CFR 62.14351) on or before April 6, 2002, or 24 months after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 3) [40 CFR 62.14356(a)(3)]
- 19. Permittee shall Complete On-Site Construction (as defined in 40 CFR 62.14351) on or before October 6, 2002, or 30 months after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 4) [40 CFR 62.14356(a)(4)]
- 20. Permittee shall Achieve Final Compliance (as defined in 40 CFR 62.14351) on or before October 6, 2002, or 30 months after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 5) [40 CFR 62.14356(a)(5)]
- 21. Permittee must conduct initial performance tests of the landfill gas collection system and air pollution control equipment on or before April 4, 2003, or 30 months and 180 days after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. [40 CFR 62.14356(a)(5)]
- 50. Each owner or operator, required by 40 CFR 60.752(b)(2) of subpart WWW to install a collection and control system, shall comply with the requirements in 40 CFR 63.1960 through 63.1985 and with the general provisions specified in table 1 of 40 CFR 63 subpart AAAA. [40 CFR 63.1955(b)]
- 51. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, owner or operator must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW, these alternatives can be used to comply with 40 CFR 63 subpart AAAA, except that all affected sources must comply with the startup, shutdown, and malfunction (SSM) requirements in subpart A of 40 CFR 63 as specified in Table 1 of 40 CFR 63 subpart AAAA and all affected sources must submit compliance reports every 6 months as specified in 40 CFR 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average. [40 CFR 63.1955(c)]

The above conditions require calculation of non-methane organic compound (NMOC) emissions annually, until such time either NMOC exceeds 50 Mg/year and a LFG collection and control system is installed, or until the landfill is closed, and also direct the owner or operator to the requirements that must be met once LFG collection and control requirements are triggered.

This landfill had received waste between the periods of 1970 to 1990, and ceased its operation on July 1, 1990⁵. This landfill was never modified or reconstructed⁶ since its closure in 1990. The waste acceptance rate during each of the operating years are entered, along with the site specific NMOC concentration of 378 ppmv, as hexane, and methane generation rate of 0.02 per year, into EPA's Land Gem – Landfill Gas Emissions Model 3.02. The NMOC emissions peak was 31.25 Mg/yr in year 1990. These emissions have been declining each year since 1990 as the landfill is no longer accepting any waste and has been closed since July 1, 1990.

The landfill never exceeded a NMOC emission rate of 50 Mg/year. NMOC emissions have been declining after reaching their peak in 1990. Therefore, the requirement to annually calculate NMOC emissions was never triggered under 40 CFR Part 62 Subpart GGG or 40 CFR Part 60 Subpart WWW, and the requirements in conditions #1 through 9, 12 through 21, 50 and 51 were not applicable, and consequently were removed from the permit.

The following condition was included in ATC N-3104-2-10:

• This facility is subject to the requirements of 40 CFR Part 62 Subpart GGG. The landfill has been closed since July 1, 1990. The landfill's NMOC emission rate never exceeded 50 megagrams per year. Therefore, this site is not required to estimate the NMOC emissions rate. [40 CFR Part 62.14353, 40 CFR 60.752(b)(1)(ii)]

Condition #11 in the PTO N-3104-2-9

This operating permit may be cancelled with APCO approval when the landfill is closed, pursuant to the requirements of this permit, if the landfill is not otherwise subject to the requirements of either 40 CFR part 70 or part 71 and if either 1) it was never subject to the requirement for a control system under 40 CFR 60.752(b)(2); or 2) the owner or operator meets the conditions for control system removal specified in 40 CFR 60.752(b)(2)(v). [40 CFR 60.752(d) and 62.14352(f)] Y

⁵ http://www.calrecycle.ca.gov/SWFacilities/Directory/50-AA-0002/SearchList/

⁶ Per definitions in 40 CFR Part 62 Subpart GGG and 40 CFR Part 60 Subpart WWW.

The condition appears to be intended to not maintain Title V permit in case a closed landfill met either item 1 or 2 in this condition. The facility may apply to remove its Title V status; however, the District requirements will still be in the permit. This condition was recommended to be replaced with the following condition in permit N-3104-2-10:

 The facility may apply to amend this permit to remove the Title V status via filing TV modification permit application. [District Rule 2520, 40 CFR Part 62.14352(f)]

However, the applicant wants to keep the Title V permit. Therefore, they are suggesting removing this condition as part of this minor modification project.

Condition #25 of PTO N-3104-2-9

25. The fuel higher heating value for the gases being flared shall be certified by third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 2520, 9.3.2] Y

The condition is revised by removing a "certified by third party supplier" phrase. This condition was recommended to be replaced with the following condition in permit N-3104-2-10:

 The fuel higher heating value for the gases being flared shall be determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588.
 [District Rules 2520, 9.3.2]

Condition # 26, 30, 42, and 70 in PTO N-3104-2-9

- The permittee shall maintain accurate records of gas volume flared. These records and all records of required monitoring data and support information shall be maintained and retained for a period of 5 years and made available for inspection at any time. [District Rule 2520, 9.4.2]
- The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2]
- 42. Records of the volume of landfill gas consumed and the total heat input shall be maintained on a daily basis. [District NSR Rule]
- 70. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

Some of these conditions contain redundant information, and were recommended to be replaced with the following conditions:

- The owner or operator shall keep records of the date, volume of landfill gas consumed (scf/day), and the total heat input (MMBtu/day). [District Rules 2201, 2520 and 4642]
- All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070, 2201, 2520 and 4642]

Condition #27 in PTO N-3104-2-9

27. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.3.2]

The applicant stated that the continuous use of the pilot burner during the flaring of the LFG is merely waste of natural gas fuel. Therefore, this condition should be revised. The condition was stated in the following manner in ATC N-3104-2-10:

• The pilot flame shall only be ignited and operated to startup the enclosed landfill gas flare. The presence of the pilot flame shall be monitored using a thermocouple or any other equivalent device that would detect the presence of the pilot flame. [District Rule 2520, 9.3.2]

Condition #28 in PTO N-3104-2-9

28. This flare shall not be used as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.3]

This landfill is not subject to 40 CFR Part 60 Subpart Cc or WWW (New Source Performance Standards). Therefore, this condition was removed from the permit.

Condition #31 in PTO N-3104-2-9

• The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2]

This condition was revised and consolidated with the applicable requirements from Rule 4642. The condition was stated in the following manner in ATC N-3104-2-10:

• The owner or operator shall maintain and operate the landfill gas flare in accordance with the manufacturer's specifications and in accordance with Section 5.2.4 of District Rule 4642 (4/16/98). A copy of manufacturer's specification shall be maintained on site. [District Rules 2520 and 4642]

Condition #32 in PTO N-3104-2-9

32. Actual flare emissions shall not exceed 20 tons VOC/year. Process information, including fuel usage data for the flare and process rates for operations controlled by the flare, shall be submitted to the District annually to demonstrate compliance with this requirement. [District Rule 2520, 9.3.2]

The applicant states that the potential emissions are less than 20 tons/year for VOC emissions. Therefore, this condition is irrelevant and should be removed from the permit.

This condition was included in the permit during initial Title V project N-980628, and appears to have come from flare template (Title V template SJV-FL-1-1).

The potential emissions released through the flare stack are 0.9 tons (1,862 pounds) of VOC per year per application review under project N-1141056. Therefore, the actual VOC emissions will never be close to 20 tons per year. Based on this fact, this requirement was found unnecessary and therefore, has been removed from the permit.

Condition #39 in PTO N-3104-2-9

39. The VOC destruction efficiency shall be at least 98% by weight, or VOC emissions as methane shall not exceed 20 ppmv @ 3% O2 from the flare stack. [District NSR Rule]

The condition language is revised and Rule 4642 reference has been added. The condition was stated in the following manner in ATC N-3104-2-10:

 The destruction efficiency for VOC shall be at least 98% (by weight), or VOC concentration shall not exceed 20 ppmv @ 3% O2 (as methane) at the flare stack. [District Rules 2201 and 4624]

Condition #48 and 49 in PTO N-3104-2-9

- 48. Source testing for VOC control efficiency and VOC concentration shall be conducted utilizing EPA Method 25A or 25C. [District Rule 2520, 9.3.2]
- 49. The heating value of the process gas shall be determined at the time of source tests. Test methods ASTM D1826 or ASTM D3588 shall be used. [District Rule 2520, 9.3.2]

Rule 4642 reference was added to the above conditions. The conditions were stated in the following manner in ATC N-3104-2-10:

- Source testing for VOC control efficiency and VOC concentration shall be conducted utilizing EPA Method 25A or 25C. [District Rules 2520 and 4642]
- The heating value of the process gas shall be determined at the time of source tests. Test methods ASTM D1826 or ASTM D3588 shall be used. [District Rules 2520 and 4642]

Additional Requirements in ATC N-3104-2-10

- The fugitive VOC emissions from the landfill shall not exceed 0.2 pounds per day. [District Rule 2201]
- Stack velocity/volumetric flow shall be determined using CARB Method 2.
 [District Rule 4642]
- The gas collection system shall be operated in a manner which maximizes the amount of landfill gas extracted while preventing overdraw that can cause fires or damage the gas collection system. [District Rule 4642]
- The owner or operator shall notify the District Compliance Division by telephone, (209) 557-6400, or electronically (via e-mail or fax, etc.) at least 24 hours before performing any maintenance that requires the system to be shutdown. The notification shall include a description of the maintenance, the date maintenance will be performed and the amount of time needed to complete the maintenance. [District Rule 4642]
- During maintenance of the gas collection system or the flare, emissions of landfill gas into atmosphere shall be minimized during shutdown. The gas collection system and the flare shall not be shutdown for more than 144 cumulative hours in any calendar year. [District Rule 4642]

- The owner or operator shall keep records of the following items: a.) surface emission tests including: the time; weather conditions, including precipitation records; areas sampled; calibration records; and test results, b.) source test reports, c.) flare combustion temperature including the dates and times of temperature readings, net heating value (MMBtu/scf) of landfill gas being combusted, volumetric gas flow rate and flare exit velocity, and d.) maintenance-related or other collection system and control device downtime, including individual well shutdown. [District Rule 4642]
- If any two or more surface emission tests exceed the 1,000 ppmv standard in Rule 4642 (4/16/98), the operator shall submit an emission control plan and a complete application for Authority to Construct, if necessary, within 12 months from the date of the second test failure, and must be in full compliance with the rule within 12 months after the Authority to Construct is issued, or after approval of the emission control plan, and conduct surface emission testing as prescribed in Section 6.3.1 of Rule 4642 (4/16/98). [District Rule 4642]

This facility is subject to Rule 4642. The above conditions were included in the ATC N-3104-2-10 to ensure on-going compliance with the applicable requirements.

Condition #54 in PTO N-3104-2-9

 The flare must operate within the parameter ranges established during the initial or most recent source test. [17 CCR 95464]

The condition is revised and stated in the following manner in ATC N-3104-2-10

 The flare shall be operated at or above the minimum temperature determined during a previous source test during which successful compliance have been demonstrated with the limits in this permit. [17 CCR 95464 and District Rule 2201]

However, the above condition was found to be conflicting with the recordkeeping requirements in condition #51 of ATC N-3104-2-10. The recordkeeping condition requires maintaining all records for periods of operation during which the parameter (i.e. temperature) boundaries established during the <u>most recent test</u> are exceeded. To resolve this matter, existing condition #54 in PTO N-3104-2-9 is being retained in the permit. The above condition in ATC N-3104-2-10 is also revised by removing the reference to "17 CCR 95464".

- The flare must operate within the parameter ranges established during the initial or most recent source test. [17 CCR 95464]
- The flare shall be operated at or above the minimum temperature determined during a previous source test during which successful compliance have been demonstrated with the limits in this permit. [District Rule 2201]

Condition #55 in PTO N-3104-2-9

• Landfill collection and control system must be operated such that landfill surface methane emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane or integrated surface emission limit of 25 ppmv as methane. [17 CCR 95464, 17 CCR 95465]

The applicant has proposed to use the above condition to demonstrate compliance with the fugitive VOC emission limit. Therefore, this condition was revised and stated in the following manner in ATC N-3104-2-10:

 Landfill collection and control system must be operated such that landfill surface methane emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane or integrated surface emission limit of 25 ppmv as methane. Successful compliance with this condition will also satisfy compliance with the fugitive VOC emissions limit in the permit. [17 CCR 95464, 17 CCR 95465, and District Rules 2201 and 4642]

Condition #56 in PTO N-3104-2-9

• Instantaneous and integrated landfill surface emissions measurements shall be done quarterly. The landfill may monitor annually provided they comply with requirements of 17 CCR 95469 (a)(1). [17 CCR 95469]

The applicant has proposed to use the above condition to demonstrate compliance with Rule 4642. Therefore, reference was added to the above condition. The condition was stated as follows:

 Instantaneous and integrated landfill surface emissions measurements shall be done quarterly. The landfill may monitor annually provided they comply with requirements of 17 CCR 95469 (a)(1). [17 CCR 95469 and District Rule 4642]

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, the proposed project:

- 1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
- 2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions:
- 3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- 4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act;
 and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act;
- 5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
- 6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

- 1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs (Appendix IV);
- 2. The source's suggested draft permit (Appendix I); and
- 3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used (Appendix III).

Compliance is expected with this Rule.

APPENDICES

Appendix I: Proposed Title V Operating Permit No. N-3104-2-11

Appendix II: Authority to Construct N-3104-2-10

Appendix III: Permit Application Appendix IV: Emissions Change

Appendix V: Previous Permit to Operate N-3104-2-9

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3104-2-11

SECTION: SE34 TOWNSHIP: 3S RANGE: 10E

EQUIPMENT DESCRIPTION:

MUNICIPAL SOLID WASTE LANDFILL, 3.8 MILLION CUBIC METER CAPACITY (144 ACRES), WITH GAS COLLECTION SYSTEM, A CONDENSATE INJECTION SYSTEM, AND ONE (1) 24 MMBTU/HR JOHN ZINK MODEL ZTOF 6X45 LANDFILL GAS FIRED FLARE

PERMIT UNIT REQUIREMENTS

- 1. This facility is subject to the requirements of 40 CFR Part 62 Subpart GGG. The landfill has been closed since July 1, 1990. The landfill's NMOC emission rate never exceeded 50 megagrams per year. Therefore, this site is not required to estimate the NMOC emissions rate. [40 CFR Part 62.14353, 40 CFR 60.752(b)(1)(ii)] Federally Enforceable Through Title V Permit
- 2. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. The operator shall test the sulfur content of the gases being flared and demonstrate the sulfur content does not exceed 3.3% by weight. [District Rules 2520 and 4801] Federally Enforceable Through Title V Permit
- To show compliance with sulfur emission limits, the gas being flared shall be tested quarterly for sulfur content (using Draeger tubes) and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 4 consecutive quarters for the flared gas, then the compliance testing frequency shall be annually. If an annual sulfur content test fails to show compliance, quarterly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 4. The sulfur content of the gas being flared shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory, or other alternative sampling method approved by the District. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 5. The fuel higher heating value for the gases being flared shall be determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 6. The pilot flame shall only be ignited and operated to startup the enclosed landfill gas flare. The presence of the pilot flame shall be monitored using a thermocouple or any other equivalent device that would detect the presence of the pilot flame. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 7. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 8. The facility shall maintain in proper operating condition a gas flow meter with a continuous recording device which measures the amount of landfill gas consumed per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 9. The owner or operator shall maintain and operate the landfill gas flare in accordance with the manufacturer's specifications and in accordance with Section 5.2.4 of District Rule 4642 (4/16/98). A copy of manufacturer's specification shall be maintained on site. [District Rules 2520 and 4642] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: GEER ROAD LANDFILL Location: 750 GEER RD, MODESTO, CA 95351 N-3104-2-11: Aug 14 2014 4:37PM - KAHLONJ

- 10. The landfill gas (LFG) consumption rate shall not exceed 510.5 MMBtu per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Emissions from the LFG collection system served by the flare shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu, 0.04 lb-SOx/MMBtu, 0.1 lb-PM10/MMBtu, 0.2 lb-CO/MMBtu, and 0.01 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The fugitive VOC emissions from the landfill shall not exceed 0.2 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Landfill collection and control system must be operated such that landfill surface methane emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane or integrated surface emission limit of 25 ppmv as methane. Successful compliance with this condition will also satisfy compliance with the fugitive VOC emissions limit in the permit. [17 CCR 95464, 17 CCR 95465, and District Rules 2201 and 4642] Federally Enforceable Through Title V Permit
- 14. Instantaneous and integrated landfill surface emissions measurements shall be done quarterly. The landfill may monitor annually provided they comply with requirements of 17 CCR 95469 (a)(1). [17 CCR 95469 and District Rule 4642] Federally Enforceable Through Title V Permit
- 15. The landfill gas condensate injection rate shall not exceed 600 gallons per day. [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
- 16. The destruction efficiency for VOC shall be at least 98% (by weight), or VOC concentration shall not exceed 20 ppmv @ 3% O2 (as methane) at the flare stack. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 17. The destruction efficiency for VOC shall be evaluated in accordance with the procedure in section 6.1.4 of Rule 4642 (4/16/98). [District Rules 2201 and 4642] Federally Enforceable Through Title V Permit
- 18. The flare shall be equipped with automatic dampers, an automatic shutdown device, and a flame arrester. [District NSR Rule, 17 CCR 95464] Federally Enforceable Through Title V Permit
- 19. The flare shall be operated at or above the minimum temperature determined during a previous source test during which successful compliance have been demonstrated with the limits in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. The flare shall be equipped with a temperature indicator and recorder which measures and records the operating temperature. The temperature indicator and recorder must operate continuously. [District NSR Rule, 17 CCR 95464] Federally Enforceable Through Title V Permit
- 21. Methane destruction efficiency shall be at least 99% by weight. [17 CCR 95464]
- 22. The owner or operator shall keep records of the date, quantity of landfill gas condensate injected, and number of operating hours per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 23. The owner or operator shall keep records of the date, volume of landfill gas consumed (scf/day), and the total heat input (MMBtu/day). [District Rules 2201, 2520 and 4642] Federally Enforceable Through Title V Permit
- 24. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 25. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rules 1081 and 4642] Federally Enforceable Through Title V Permit
- 26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 4642] Federally Enforceable Through Title V Permit
- 27. Source testing to determine NOx and CO emissions, as well as the VOC destruction efficiency, shall be conducted annually. [District Rules 2520, 9.3.2 and NSR] Federally Enforceable Through Title V Permit

PERMITURE REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: GEER ROAD LANDFILL Location: 750 GEER RD,MODESTO, CA 95351 N-3104-2-11 Aug 14 2014 4/37PM – KAHLONJ

- 28. Source testing for NOx and CO shall be conducted utilizing EPA Method 7E and EPA Method 10 respectively, or CARB Method 100. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. Source testing for VOC control efficiency and VOC concentration shall be conducted utilizing EPA Method 25A or 25C. [District Rules 2520 and 4642] Federally Enforceable Through Title V Permit
- 30. The heating value of the process gas shall be determined at the time of source tests. Test methods ASTM D1826 or ASTM D3588 shall be used. [District Rules 2520 and 4642] Federally Enforceable Through Title V Permit
- 31. Stack velocity/volumetric flow shall be determined using CARB Method 2. [District Rule 4642] Federally Enforceable Through Title V Permit
- 32. The gas collection system shall be operated in a manner which maximizes the amount of landfill gas extracted while preventing overdraw that can cause fires or damage the gas collection system. [District Rule 4642] Federally Enforceable Through Title V Permit
- 33. The owner or operator shall notify the District Compliance Division by telephone, (209) 557-6400, or electronically (via e-mail or fax, etc.) at least 24 hours before performing any maintenance that requires the system to be shutdown. The notification shall include a description of the maintenance, the date maintenance will be performed and the amount of time needed to complete the maintenance. [District Rule 4642] Federally Enforceable Through Title V Permit
- 34. During maintenance of the gas collection system or the flare, emissions of landfill gas into atmosphere shall be minimized during shutdown. The gas collection system and the flare shall not be shutdown for more than 144 cumulative hours in any calendar year. [District Rule 4642] Federally Enforceable Through Title V Permit
- 35. The owner or operator shall keep records of the following items: a.) surface emission tests including: the time; weather conditions, including precipitation records; areas sampled; calibration records; and test results, b.) source test reports, c.) flare combustion temperature including the dates and times of temperature readings, net heating value (MMBtu/scf) of landfill gas being combusted, volumetric gas flow rate and flare exit velocity, and d.) maintenance-related or other collection system and control device downtime, including individual well shutdown. [District Rule 4642] Federally Enforceable Through Title V Permit
- 36. If any two or more surface emission tests exceed the 1,000 ppmv standard in Rule 4642 (4/16/98), the operator shall submit an emission control plan and a complete application for Authority to Construct, if necessary, within 12 months from the date of the second test failure, and must be in full compliance with the rule within 12 months after the Authority to Construct is issued, or after approval of the emission control plan, and conduct surface emission testing as prescribed in Section 6.3.1 of Rule 4642 (4/16/98). [District Rule 4642] Federally Enforceable Through Title V Permit
- 37. Landfill gas collection system wellheads must be operated under vacuum. Monthly monitoring of wellheads is required. [17 CCR 95464]
- 38. Landfill gas collection system components downstream of blower have a leak limit of 500 ppmv as methane. Components must be checked quarterly. If compliance with the methane limit has been demonstrated for 4 consecutive quarters, then the component checking frequency shall be annually. If an annual test fails to show compliance, quarterly testing shall resume. [17 CCR 95464]
- 39. The flare must operate within the parameter ranges established during the initial or most recent source test. [17 CCR 95464]
- 40. Permittee shall keep records of all gas collection system downtime exceeding five days, including individual well shutdown and disconnection times and the reason for downtime. [17 CCR 95470]
- 41. Permittee shall keep records of all gas control system downtime in excess of one hour, the reason for the downtime and the length of time the gas control system was shutdown. [17 CCR 95470]
- 42. Permittee shall keep records of the expected gas generation flow rate calculated pursuant to section 95471(e). [17 CCR 95470]

PERMITUNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: GEER ROAD LANDFILL Location: 750 GEER RD, MODESTO, CA 95351 N-3104-2-11 Aug 14 2014 4:37PM - KARLONJ

- 43. Permittee shall keep records of all instantaneous surface readings of 200 ppmv or greater; all exceedances of the limits in sections 95464(b)(1)(B) or 95465, including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, the action taken to repair the leak, date of repair, any required re-monitoring and the remonitored concentration in ppmv, and wind speed during surface sampling; and the installation date and location of each well installed as part of a gas collection system expansion. [17 CCR 95470]
- 44. Permittee shall keep records of any positive wellhead gauge pressure measurements, the date of the measurements, the well identification number, and the corrective action taken. [17 CCR 95470]
- 45. Permittee shall keep records of the annual solid waste acceptance rate and the current amount of waste-in-place. [17 CCR 95470]
- 46. Permittee shall keep records of the nature, location, amount, and date of deposition of non-degradable waste for any landfill areas excluded from the collection system. [17 CCR 95470]
- 47. Permittee shall keep records of any source tests conducted pursuant to section 95464(b)(4). [17 CCR 95470]
- 48. Permittee shall keep records describing the mitigation measures taken to prevent the release of methane or other emissions into the atmosphere during the following activities: 1. When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment; 2. During repairs or the temporary shutdown of gas collection system components; or, 3. When solid waste was excavated and moved. [17 CCR 95470]
- 49. Permittee shall keep records of any construction activities pursuant to section 95466. The records must contain the following information: 1. A description of the actions being taken, the areas of the MSW landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions. 2. Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection system components. 3. A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts. [17 CCR 95470]
- 50. Permittee shall keep records of the equipment operating parameters specified to be monitored under section 95469(b)(1) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded. The records must include the following information: 1. For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) was determined and a gas flow rate device which must record the flow to the control device at least every 15 minutes. [17 CCR 95470]
- 51. Permittee shall submit the following reports as required in section 95470(b): Closure notification, Equipment removal report and Annual report. All reports must be accompanied by a certification of truth, accuracy, and completeness signed by a responsible official. [17 CCR 95470]
- 52. Permittee may comply with the CARB regulation for landfill methane control measures by using approved alternative compliance options. The permittee shall obtain written District approval for the use of any alternative compliance options not specifically approved by this permit. Changes to the approved alternate compliance options must be made and approved in writing. Documentation of approved alternative compliance options shall be available for inspection upon request. [17 CCR 95468]
- 53. The owner or operator shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. [40 CFR 60.758(a), 62.14355(a) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 54. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070, 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: GEER ROAD LANDFILL
Location: 750 GEER RD, MODESTO, CA 95351

Appendix II Authority to Construct N-3104-2-10





AUTHORITY TO CONSTRUCT

PERMIT NO: N-3104-2-10

ISSUANCE DATE: 07/08/2014

LEGAL OWNER OR OPERATOR: GEER ROAD LANDFILL

MAILING ADDRESS:

3800 CORNUCOPIA WAY

SUITE C

MODESTO, CA 95358

LOCATION:

750 GEER RD

MODESTO, CA 95351

SECTION: SE34 TOWNSHIP: 3S RANGE: 10E

EQUIPMENT DESCRIPTION:

MODIFICATION OF MUNICIPAL SOLID WASTE LANDFILL, 3.8 MILLION CUBIC METER CAPACITY (144 ACRES), WITH GAS COLLECTION SYSTEM, A CONDENSATE INJECTION SYSTEM, AND ONE (1) 24 MMBTU/HR JOHN ZINK MODEL ZTOF 6X45 LANDFILL GAS FIRED FLARE: TO INCREASE VOC EMISSIONS RATE TO 0.01 LB/MMBTU AND RE-EVALUATE THE REQUIREMENTS REFERENCING 40 CFR PART 62 SUBPART GGG

CONDITIONS

- The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- This facility is subject to the requirements of 40 CFR Part 62 Subpart GGG. The landfill has been closed since July 1, 2. 1990. The landfill's NMOC emission rate never exceeded 50 megagrams per year. Therefore, this site is not required to estimate the NMOC emissions rate. [40 CFR Part 62.14353, 40 CFR 60.752(b)(1)(ii)]
- The facility may apply to amend this permit to remove the Title V status via filing Title V modification application. 3. [District Rule 2520, 40 CFR Part 62.14352(f)]
- The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. The operator shall test the sulfur content of the gases being flared and demonstrate the sulfur content does not exceed 3.3% by weight. [District Rules 2520 and 4801] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director /

Arnaud Marjollet, Director of Permit Services

- 5. To show compliance with sulfur emission limits, the gas being flared shall be tested quarterly for sulfur content (using Draeger tubes) and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 4 consecutive quarters for the flared gas, then the compliance testing frequency shall be annually. If an annual sulfur content test fails to show compliance, quarterly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 6. The sulfur content of the gas being flared shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory, or other alternative sampling method approved by the District. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 7. The fuel higher heating value for the gases being flared shall be determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 8. The pilot flame shall only be ignited and operated to startup the enclosed landfill gas flare. The presence of the pilot flame shall be monitored using a thermocouple or any other equivalent device that would detect the presence of the pilot flame. [District Rule 2520, 9.3.2]
- 9. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 10. The facility shall maintain in proper operating condition a gas flow meter with a continuous recording device which measures the amount of landfill gas consumed per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. The owner or operator shall maintain and operate the landfill gas flare in accordance with the manufacturer's specifications and in accordance with Section 5.2.4 of District Rule 4642 (4/16/98). A copy of manufacturer's specification shall be maintained on site. [District Rules 2520 and 4642]
- 12. The landfill gas (LFG) consumption rate shall not exceed 510.5 MMBtu per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Emissions from the LFG collection system served by the flare shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu, 0.04 lb-SOx/MMBtu, 0.1 lb-PM10/MMBtu, 0.2 lb-CO/MMBtu, and 0.01 lb-VOC/MMBtu. [District Rule 2201]
- 14. The fugitive VOC emissions from the landfill shall not exceed 0.2 pounds per day. [District Rule 2201]
- 15. Landfill collection and control system must be operated such that landfill surface methane emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane or integrated surface emission limit of 25 ppmv as methane. Successful compliance with this condition will also satisfy compliance with the fugitive VOC emissions limit in the permit. [17 CCR 95464, 17 CCR 95465, and District Rules 2201 and 4642]
- 16. Instantaneous and integrated landfill surface emissions measurements shall be done quarterly. The landfill may monitor annually provided they comply with requirements of 17 CCR 95469 (a)(1). [17 CCR 95469 and District Rule 4642]
- 17. The landfill gas condensate injection rate shall not exceed 600 gallons per day. [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
- 18. The destruction efficiency for VOC shall be at least 98% (by weight), or VOC concentration shall not exceed 20 ppmv @ 3% O2 (as methane) at the flare stack. [District Rules 2201 and 4624]
- 19. The destruction efficiency for VOC shall be evaluated in accordance with the procedure in section 6.1.4 of Rule 4642 (4/16/98). [District Rules 2201 and 4642]
- 20. The flare shall be equipped with automatic dampers, an automatic shutdown device, and a flame arrester. [District NSR Rule, 17 CCR 95464] Federally Enforceable Through Title V Permit
- 21. The flare shall be operated at or above the minimum temperature determined during a previous source test during which successful compliance have been demonstrated with the limits in this permit. [17 CCR 95464 and District Rule 2201]

- 22. The flare shall be equipped with a temperature indicator and recorder which measures and records the operating temperature. The temperature indicator and recorder must operate continuously. [District NSR Rule, 17 CCR 95464] Federally Enforceable Through Title V Permit
- 23. Methane destruction efficiency shall be at least 99% by weight. [17 CCR 95464]
- 24. The owner or operator shall keep records of the date, quantity of landfill gas condensate injected, and number of operating hours per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 25. The owner or operator shall keep records of the date, volume of landfill gas consumed (scf/day), and the total heat input (MMBtu/day). [District Rules 2201, 2520 and 4642]
- 26. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rules 1081 and 4642]
- 28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 4642]
- 29. Source testing to determine NOx and CO emissions, as well as the VOC destruction efficiency, shall be conducted annually. [District Rules 2520, 9.3.2 and NSR] Federally Enforceable Through Title V Permit
- 30. Source testing for NOx and CO shall be conducted utilizing EPA Method 7E and EPA Method 10 respectively, or CARB Method 100. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 31. Source testing for VOC control efficiency and VOC concentration shall be conducted utilizing EPA Method 25A or 25C. [District Rules 2520 and 4642]
- 32. The heating value of the process gas shall be determined at the time of source tests. Test methods ASTM D1826 or ASTM D3588 shall be used. [District Rules 2520 and 4642]
- 33. Stack velocity/volumetric flow shall be determined using CARB Method 2. [District Rule 4642]
- 34. The gas collection system shall be operated in a manner which maximizes the amount of landfill gas extracted while preventing overdraw that can cause fires or damage the gas collection system. [District Rule 4642]
- 35. The owner or operator shall notify the District Compliance Division by telephone, (209) 557-6400, or electronically (via e-mail or fax, etc.) at least 24 hours before performing any maintenance that requires the system to be shutdown. The notification shall include a description of the maintenance, the date maintenance will be performed and the amount of time needed to complete the maintenance. [District Rule 4642]
- 36. During maintenance of the gas collection system or the flare, emissions of landfill gas into atmosphere shall be minimized during shutdown. The gas collection system and the flare shall not be shutdown for more than 144 cumulative hours in any calendar year. [District Rule 4642]
- 37. The owner or operator shall keep records of the following items: a.) surface emission tests including: the time; weather conditions, including precipitation records; areas sampled; calibration records; and test results, b.) source test reports, c.) flare combustion temperature including the dates and times of temperature readings, net heating value (MMBtu/scf) of landfill gas being combusted, volumetric gas flow rate and flare exit velocity, and d.) maintenance-related or other collection system and control device downtime, including individual well shutdown. [District Rule 4642]
- 38. If any two or more surface emission tests exceed the 1,000 ppmv standard in Rule 4642 (4/16/98), the operator shall submit an emission control plan and a complete application for Authority to Construct, if necessary, within 12 months from the date of the second test failure, and must be in full compliance with the rule within 12 months after the Authority to Construct is issued, or after approval of the emission control plan, and conduct surface emission testing as prescribed in Section 6.3.1 of Rule 4642 (4/16/98). [District Rule 4642]
- 39. Landfill gas collection system wellheads must be operated under vacuum. Monthly monitoring of wellheads is required. [17 CCR 95464]

- 40. Landfill gas collection system components downstream of blower have a leak limit of 500 ppmv as methane. Components must be checked quarterly. If compliance with the methane limit has been demonstrated for 4 consecutive quarters, then the component checking frequency shall be annually. If an annual test fails to show compliance, quarterly testing shall resume. [17 CCR 95464]
- 41. Permittee shall keep records of all gas collection system downtime exceeding five days, including individual well shutdown and disconnection times and the reason for downtime. [17 CCR 95470]
- 42. Permittee shall keep records of all gas control system downtime in excess of one hour, the reason for the downtime and the length of time the gas control system was shutdown. [17 CCR 95470]
- 43. Permittee shall keep records of the expected gas generation flow rate calculated pursuant to section 95471(e). [17 CCR 95470]
- 44. Permittee shall keep records of all instantaneous surface readings of 200 ppmv or greater; all exceedances of the limits in sections 95464(b)(1)(B) or 95465, including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, the action taken to repair the leak, date of repair, any required re-monitoring and the remonitored concentration in ppmv, and wind speed during surface sampling; and the installation date and location of each well installed as part of a gas collection system expansion. [17 CCR 95470]
- 45. Permittee shall keep records of any positive wellhead gauge pressure measurements, the date of the measurements, the well identification number, and the corrective action taken. [17 CCR 95470]
- 46. Permittee shall keep records of the annual solid waste acceptance rate and the current amount of waste-in-place. [17 CCR 95470]
- 47. Permittee shall keep records of the nature, location, amount, and date of deposition of non-degradable waste for any landfill areas excluded from the collection system. [17 CCR 95470]
- 48. Permittee shall keep records of any source tests conducted pursuant to section 95464(b)(4). [17 CCR 95470]
- 49. Permittee shall keep records describing the mitigation measures taken to prevent the release of methane or other emissions into the atmosphere during the following activities: 1. When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment; 2. During repairs or the temporary shutdown of gas collection system components; or, 3. When solid waste was excavated and moved. [17 CCR 95470]
- 50. Permittee shall keep records of any construction activities pursuant to section 95466. The records must contain the following information: 1. A description of the actions being taken, the areas of the MSW landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions. 2. Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection system components. 3. A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts. [17 CCR 95470]
- 51. Permittee shall keep records of the equipment operating parameters specified to be monitored under section 95469(b)(1) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded. The records must include the following information: 1. For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) was determined and a gas flow rate device which must record the flow to the control device at least every 15 minutes. [17 CCR 95470]
- 52. Permittee shall submit the following reports as required in section 95470(b): Closure notification, Equipment removal report and Annual report. All reports must be accompanied by a certification of truth, accuracy, and completeness signed by a responsible official. [17 CCR 95470]
- 53. Permittee may comply with the CARB regulation for landfill methane control measures by using approved alternative compliance options. The permittee shall obtain written District approval for the use of any alternative compliance options not specifically approved by this permit. Changes to the approved alternate compliance options must be made and approved in writing. Documentation of approved alternative compliance options shall be available for inspection upon request. [17 CCR 95468]

- 54. The owner or operator shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. [40 CFR 60.758(a), 62.14355(a) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 55. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070, 2520, 9.4.2]

Appendix III Permit Application



[] ADMINISTRATIVE AMENDMENT

San Joaquin Valley Air Pollution Control District



[] SIGNIFICANT MODIFICATION

www.valleyair.org

Permit Application For:

[] MINOR MODIFICATION

1. PERMIT TO BE ISSUED TO: STANISLA	AUS COUNTY DEPART	MENT OF ENVIRONM	ENTAL RESOURCES
2. MAILING ADDRESS:		11	
STREET/P,O, BOX; 3800 CORNUCOPIA	VAY, SUITE C		
CITY: MODESTO	STATE: CA		9-DIGIT ZIP CODE: 95358
3. LOCATION WHERE THE EQUIPMENT	WILL BE OPERATED:		INSTALLATION DATE: 1996
STREET: 750 GEER ROAD	CITY:	MODESTO	<u></u>
4 SECTION SE34 TOWNS	SHIP 3S RANGE	10E	- ×
4. GENERAL NATURE OF BUSINESS: CLO	OSED MUNICIPAL CLA	SS III LANDFILL	
5. DESCRIPTION OF EQUIPMENT OR MO (include Permit #s if known, and use addition)	DIFICATION FOR WHIC	H APPLICATION IS MA	DE
MUNICIPAL SOLID WASTE LANDFIF COLLECTION SYSTEM, A CONDENSA ZTOF 6X45 LANDFILL GAS FIRED F EXISTING PERMIT TO OPERATE NO EXISTING AUTHORITY TO CONSTR	ATE INJECTION SYSTE LARE.).: N-3104-2-9	M, AND ONE (1) 24 M	
6. TYPE OR PRINT NAME OF APPLICANT JAMI AGGERS		*	TITLE OF APPLICANT: DIRECTOR
7. SIGNATURE OF APPLICANT:	2	DATE:	PHONE: (209) 525-6700
49-11	lase.	7/15/14	FAX: (209)525-6773 EMAIL: jaggers@envres.org
For APCD Use Only:	(J)		
DATE STAMP	FILING FEE RECEIVED : \$		CHECK#:
	DATE PAID:		
	PROJECT NO:		FACILITY ID:



San Joaquin Valley Unified Air Pollution Control District



TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

1.	TYPE OF PERMIT ACTION (Check appropriate box)
[] [X]	• •
C	OMPANY NAME: Stanislaus County Department of Environmental Resources FACILITY ID: N - 3104
1.	. Type of Organization: [] Corporation [] Sole Ownership [X] Government [] Partnership [] Utility
2.	. Owner's Name: Stanislaus County Department of Environmental Resources
3.	Agent to the Owner: Jami Aggers
II. (COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation): Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s). Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis. Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted. Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.
Si Si Na	gnature of Responsible Official (please print) Director tle of Responsible Official (please print)

Appendix IV Emissions Change

Emissions Change

Emissions change under ATC project that resulted in ATC N-3104-2-10 is summarized in the following table.

Emissions Change						
Pollutant	Annual PE2 (lb/yr)	Annual PE1 (lb/yr)	Quarterly IPE (lb/qtr)			
NOx	9,308	9,308	0			
SOx	7,446	7,446	0			
PM ₁₀	18,652	18,652	0			
CO	37,267	37,267	0			
VOC	1,935	803	283			

Appendix V Previous Permit to Operate N-3104-2-9

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3104-2-9

EXPIRATION DATE: 02/29/2016

SECTION: SE34 TOWNSHIP: 3S RANGE: 10E

EQUIPMENT DESCRIPTION:

MUNICIPAL SOLID WASTE LANDFILL, 3.8 MILLION CUBIC METER CAPACITY (144 ACRES), WITH GAS COLLECTION SYSTEM, A CONDENSATE INJECTION SYSTEM, AND ONE (1) 24 MMBTU/HR JOHN ZINK MODEL ZTOF 6X45 LANDFILL GAS FIRED FLARE

PERMIT UNIT REQUIREMENTS

- The NMOC emission rate shall be calculated using the equation in 40CFR60.754(a)(1)(i), if the actual year-to-year solid waste acceptance rate is known or the equation in 40CFR60.754(a)(1)(ii), if the actual year-to-year solid waste acceptance rate is unknown. The values for k, Lo, and CNMOC for both equations shall be taken from 40CFR60.754(a)(1), as appropriate. Both equations may be used if the actual year-to-year acceptance rate is known for a part of the landfill life, but unknown for another part of the landfill life. The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating R, if documentation of the nature and amount of such wastes is maintained. (Tier 1 specifications) [40 CFR 60.754(a)(1) and 62.14354] Federally Enforceable Through Title V Permit
- Tier 3 specifications to determine the site-specific methane generation rate constant shall include the following: 1) EPA Method 2E or another method approved by the EPA shall be used, 2) The NMOC mass emission rate shall be recalculated using the average site-specific NMOC concentration and the site-specific methane generation rate constant k, instead of the default values in 40 CFR 60(a)(1), and 3) If the resulting calculated NMOC mass emission rate is equal to or greater than 50 megagrams/year, the landfill owner or operator shall comply with 60.752(b)(2). [40 CFR 60.754(a)(4), (a)(5) and (i) and 62.14354] Federally Enforceable Through Title V Permit
- If Tier 3 specifications are used to determine the site-specific methane generation rate and the calculated NMOC mass emission rate is less than 50 megagrams/year, then a periodic emission rate report shall be submitted to the Administrator, pursuant to 60.757(b)(1) and the NMOC concentration shall be recalculated annually, pursuant to 60.757(b)(1), using the site-specific methane generation rate constant and the NMOC concentration obtained using Tier 2 specifications. Determination of the site-specific methane generation rate constant is performed once and used in all subsequent annual NMOC emission rate calculations. [40 CFR 60.754(a)(4)(ii) and 62.14354] Federally Enforceable Through Title V Permit
- For PSD purposes, the NMOC emission rate shall be estimated and compared to the PSD major source and significance levels in 40 CFR 51.166 or 52.21, using AP-42 or EPA-approved procedures. [40 CFR 60.754(c) and 62.14354] Federally Enforceable Through Title V Permit
- The NMOC emission rate shall be recalculated and reported to the APCO annually, except as otherwise provided in this permit, until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams/year and a collection and control system is installed or until the landfill is closed. [40 CFR 60.752(b)(1), 60.754(a), 60.757(b), 62.14354 and 62.14355] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: GEER ROAD LANDFILL

Location: 750 GEER RD, MODESTO, CA 95351 N-3104-2-9 : Jul 22 2014 11:34AM -- KAHLONJ

- If the NMOC emission rate, as reported in the annual report is less than 50 megagrams/year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5year period in lieu of the annual reports for those 5 years. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years. All data and calculations upon which this estimate is based shall be provided to the APCO. This estimate shall be revised at least once every 5 years. [40 CFR 60.757(b)(1)(ii) and 62.14355] Federally Enforceable Through Title V Permit
- If the actual waste acceptance rate exceeds the estimated rate used in any year reported in a 5-year estimate of the NMOC emission rate, then a revised 5-year estimate shall be submitted to the APCO. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated acceptance rate, [40 CFR 60.757(b)(1)(ii) and 62.14355] Federally Enforceable Through Title V Permit
- The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. [40 CFR 60.757(b)(2) and 62.14355] Federally Enforceable Through Title V Permit
- If the owner or operator elects to recalculate the NMOC emission rate using Tier 3 specifications and the resulting NMOC emission rate is less than 50 megagrams/year, annual periodic reporting shall resume. The revised NMOC emission rate report, with the recalculated NMOC emission rate using Tier 3 specifications, shall be submitted within 1 year of the first Tier 1 calculated exceedance of 50 megagrams/year. [40 CFR 60.757(c)(2) and 62.14355] Federally Enforceable Through Title V Permit
- 10. Each owner or operator shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. [40 CFR 60.758(a), 62.14355(a) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 11. This operating permit may be cancelled with APCO approval when the landfill is closed, pursuant to the requirements of this permit, if the landfill is not otherwise subject to the requirements of either 40 CFR part 70 or part 71 and if either 1) it was never subject to the requirement for a control system under 40 CFR 60.752(b)(2); or 2) the owner or operator meets the conditions for control system removal specified in 40 CFR 60.752(b)(2)(v). [40 CFR 60.752(d) and 62.14352(f)] Federally Enforceable Through Title V Permit
- 12. If the landfill is permanently closed, a closure notification shall be submitted to the APCO within 30 days of waste disposal cessation. A permanent closure must take place in accordance with 40 CFR 258.60. If a closure report has been submitted, no additional waste may be placed in the landfill without filing a notification of modification to the APCO, pursuant to 40 CFR 60.7(a)(4). [40 CFR 60.752(b)(1)(ii)(B), 60.757(d) and 62.14352(f)] Federally Enforceable Through Title V Permit
- 13. If the calculated NMOC is equal to or greater than 50 megagrams/year, the owner or operator shall install a collection and control system, that effectively captures the gas generated within the landfill, within 30 months of that determination. This operating permit must be modified accordingly to show compliance with 40 CFR 62, Subpart GGG requirements applicable to a MSWL with a collection and control system. [40 CFR 60.752(b)(2)(ii), 60.753, 60.755, 60.756, 62.14353 and 62.14354] Federally Enforceable Through Title V Permit
- 14. If a gas collection and control system is installed, it shall comply with the operational standards of 40 CFR 60.753, the compliance provisions of 40 CFR 60.755, the monitoring provisions of 40 CFR 60.756, the reporting and record keeping requirements of 40 CFR 60.757 and 60.758, and the requirements of 40 CFR 60.759 (for active collection systems). [40 CFR 60.752(b)(2)(ii), 60.753, 60.755, 60.756, 60.757, 60.758, 60.759, 62.14353 and 62.14354(b)] Federally Enforceable Through Title V Permit
- 15. Permittee shall comply with the Increments of Progress as defined in Table 3 of 40 CFR 62, Subpart GGG, unless a site specific schedule is approved by EPA, which includes notification of EPA no later than 10 business days after completing each increment of progress. [40 CFR 62.14355(b)] Federally Enforceable Through Title V Permit
- 16. Permittee shall submit the Final Control Plan (as defined in 40 CFR 62.14351) one year after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 1) [40 CFR 62.14356(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate,

Facility Name: GEER ROAD LANDFILL

Location: 750 GEER RD N-3104-2-9: Jul 22 2014 11:34AM – KAHLONJ

- 17. Permittee shall Award Contract(s) (as defined in 40 CFR 62.14351) on or before December 6, 2001, or 20 months after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 2) [40 CFR 62.14356(a)(2)] Federally Enforceable Through Title V Permit
- 18. Permittee shall Initiate On-Site Construction (as defined in 40 CFR 62.14351) on or before April 6, 2002, or 24 months after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 3) [40 CFR 62.14356(a)(3)] Federally Enforceable Through Title V Permit
- 19. Permittee shall Complete On-Site Construction (as defined in 40 CFR 62.14351) on or before October 6, 2002, or 30 months after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 4) [40 CFR 62.14356(a)(4)] Federally Enforceable Through Title V Permit
- 20. Permittee shall Achieve Final Compliance (as defined in 40 CFR 62.14351) on or before October 6, 2002, or 30 months after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. (Increment 5) [40 CFR 62.14356(a)(5)] Federally Enforceable Through Title V Permit
- 21. Permittee must conduct initial performance tests of the landfill gas collection system and air pollution control equipment on or before April 4, 2003, or 30 months and 180 days after the first annual emission rate report showing NMOC emissions > 50 megagrams/year, unless a site-specific schedule is approved by EPA. [40 CFR 62.14356(a)(5)] Federally Enforceable Through Title V Permit
- 22. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. The operator shall test the sulfur content of the gases being flared and demonstrate the sulfur content does not exceed 3.3% by weight. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. To show compliance with sulfur emission limits, the gas being flared shall be tested quarterly for sulfur content (using Draeger tubes) and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 4 consecutive quarters for the flared gas, then the compliance testing frequency shall be annually. If an annual sulfur content test fails to show compliance, quarterly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. The sulfur content of the gas being flared shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory, or other alternative sampling method approved by the District. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. The fuel higher heating value for the gases being flared shall be certified by third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. The permittee shall maintain accurate records of gas volume flared. These records and all records of required monitoring data and support information shall be maintained and retained for a period of 5 years and made available for inspection at any time. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 27. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. This flare shall not be used as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.3] Federally Enforceable Through Title V Permit
- 29. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 30. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: GEER ROAD LANDFILL

Location: 750 GEER RD, MODESTO, CA 95351 N-3104-2-9 Jul 22 2014 11:34AM -- KAHLONJ

- 31. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 32. Actual flare emissions shall not exceed 20 tons VOC/year. Process information, including fuel usage data for the flare and process rates for operations controlled by the flare, shall be submitted to the District annually to demonstrate compliance with this requirement. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 33. The facility shall maintain in proper operating condition a gas flow meter with a continuous recording device which measures the amount of landfill gas consumed per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 34. The landfill gas consumption rate shall not exceed 510.5 MMBtu per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 35. Emission concentrations shall not exceed the following: NOx, 0.05 lb/MMBtu; CO, 0.2 lb/MMBtu; VOC, 0.004 lb/MMBtu; SOx, 0.04 lb/MMBtu; PM10, 0.1 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
- 36. The landfill gas condensate injection rate shall not exceed 600 gallons per day. [District Rules 4102 and NSR] Federally Enforceable Through Title V Permit
- 37. The flare shall be equipped with automatic dampers, an automatic shutdown device, and a flame arrester. [District NSR Rule, 17 CCR 95464] Federally Enforceable Through Title V Permit
- 38. The flare shall be equipped with a temperature indicator and recorder which measures and records the operating temperature. The temperature indicator and recorder must operate continuously. [District NSR Rule, 17 CCR 95464] Federally Enforceable Through Title V Permit
- 39. The VOC destruction efficiency shall be at least 98% by weight, or VOC emissions as methane shall not exceed 20 ppmv @ 3% O2 from the flare stack. [District NSR Rule] Federally Enforceable Through Title V Permit
- 40. Methane destruction efficiency shall be at least 99% by weight. [17 CCR 95464]
- 41. Daily records of the quantity of landfill gas condensate injected, and of the number of operating hours per day shall be kept. [District NSR Rule] Federally Enforceable Through Title V Permit
- 42. Records of the volume of landfill gas consumed and the total heat input shall be maintained on a daily basis. [District NSR Rule] Federally Enforceable Through Title V Permit
- 43. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 44. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 45. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 46. Source testing to determine NOx and CO emissions, as well as the VOC destruction efficiency, shall be conducted annually. [District Rules 2520, 9.3.2 and NSR] Federally Enforceable Through Title V Permit
- 47. Source testing for NOx and CO shall be conducted utilizing EPA Method 7E and EPA Method 10 respectively, or CARB Method 100. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 48. Source testing for VOC control efficiency and VOC concentration shall be conducted utilizing EPA Method 25A or 25C. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 49. The heating value of the process gas shall be determined at the time of source tests. Test methods ASTM D1826 or ASTM D3588 shall be used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

- 50. Each owner or operator, required by 40 CFR 60.752(b)(2) of subpart WWW to install a collection and control system, shall comply with the requirements in 40 CFR 63.1960 through 63.1985 and with the general provisions specified in table 1 of 40 CFR 63 subpart AAAA. [40 CFR 63.1955(b)] Federally Enforceable Through Title V Permit
- 51. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, owner or operator must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW, these alternatives can be used to comply with 40 CFR 63 subpart AAAA, except that all affected sources must comply with the startup, shutdown, and malfunction (SSM) requirements in subpart A of 40 CFR 63 as specified in Table 1 of 40 CFR 63 subpart AAAA and all affected sources must submit compliance reports every 6 months as specified in 40 CFR 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average. [40 CFR 63.1955(c)] Federally Enforceable Through Title V Permit
- 52. Landfill gas collection system wellheads must be operated under vacuum. Monthly monitoring of wellheads is required. [17 CCR 95464]
- 53. Landfill gas collection system components downstream of blower have a leak limit of 500 ppmy as methane. Components must be checked quarterly. If compliance with the methane limit has been demonstrated for 4 consecutive quarters, then the component checking frequency shall be annually. If an annual test fails to show compliance, quarterly testing shall resume. [17 CCR 95464]
- 54. The flare must operate within the parameter ranges established during the initial or most recent source test. [17 CCR 954641
- 55. Landfill collection and control system must be operated such that landfill surface methane emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane or integrated surface emission limit of 25 ppmv as methane. [17 CCR 95464, 17 CCR 95465]
- 56. Instantaneous and integrated landfill surface emissions measurements shall be done quarterly. The landfill may monitor annually provided they comply with requirements of 17 CCR 95469 (a)(1), [17 CCR 95469]
- 57. Permittee shall keep records of all gas collection system downtime exceeding five days, including individual well shutdown and disconnection times and the reason for downtime. [17 CCR 95470]
- 58. Permittee shall keep records of all gas control system downtime in excess of one hour, the reason for the downtime and the length of time the gas control system was shutdown. [17 CCR 95470]
- 59. Permittee shall keep records of the expected gas generation flow rate calculated pursuant to section 95471(e), [17 CCR 95470]
- 60. Permittee shall keep records of all instantaneous surface readings of 200 ppmv or greater; all exceedances of the limits in sections 95464(b)(1)(B) or 95465, including the location of the leak (or affected grid), leak concentration in ppmy, date and time of measurement, the action taken to repair the leak, date of repair, any required re-monitoring and the remonitored concentration in ppmv, and wind speed during surface sampling; and the installation date and location of each well installed as part of a gas collection system expansion. [17 CCR 95470]
- 61. Permittee shall keep records of any positive wellhead gauge pressure measurements, the date of the measurements, the well identification number, and the corrective action taken. [17 CCR 95470]
- 62. Permittee shall keep records of the annual solid waste acceptance rate and the current amount of waste-in-place. [17 CCR 95470]
- 63. Permittee shall keep records of the nature, location, amount, and date of deposition of non-degradable waste for any landfill areas excluded from the collection system. [17 CCR 95470]
- 64. Permittee shall keep records of any source tests conducted pursuant to section 95464(b)(4). [17 CCR 95470]

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- 65. Permittee shall keep records describing the mitigation measures taken to prevent the release of methane or other emissions into the atmosphere during the following activities: 1. When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment; 2. During repairs or the temporary shutdown of gas collection system components; or, 3. When solid waste was excavated and moved. [17 CCR 95470]
- 66. Permittee shall keep records of any construction activities pursuant to section 95466. The records must contain the following information: 1. A description of the actions being taken, the areas of the MSW landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions. 2. Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection system components. 3. A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts. [17 CCR 95470]
- 67. Permittee shall keep records of the equipment operating parameters specified to be monitored under section 95469(b)(1) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded. The records must include the following information: 1. For enclosed flares, all 3hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) was determined and a gas flow rate device which must record the flow to the control device at least every 15 minutes. [17 CCR 95470]
- 68. Permittee shall submit the following reports as required in section 95470(b): Closure notification, Equipment removal report and Annual report. All reports must be accompanied by a certification of truth, accuracy, and completeness signed by a responsible official. [17 CCR 95470]
- 69. Permittee may comply with the CARB regulation for landfill methane control measures by using approved alternative compliance options. The permittee shall obtain written District approval for the use of any alternative compliance options not specifically approved by this permit. Changes to the approved alternate compliance options must be made and approved in writing. Documentation of approved alternative compliance options shall be available for inspection upon request. [17 CCR 95468]
- 70. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]